

平成 28 年 3 月 29 日

# 博士論文審査結果報告

## Report on Ph.D. / Doctoral Dissertation Defence

政策研究大学院大学  
准教授 HSU, Minchung

審査委員会を代表し、以下のとおり審査結果を報告します。

On behalf of the Doctoral Thesis Review Committee, I would like to report the result of the Ph. D. / Doctoral Dissertation Defense as follows.

学位申請者氏名 Ph.D. Candidate	Tanyasorn Ekapirak		
学籍番号 ID Number	PHD13201		
プログラム名 Program	政策分析プログラム Policy Analysis Program		
審査委員会 Doctoral Thesis Review Committee	主査 Main referee	HSU, Minchung	主指導教員 Main advisor
	審査委員 Referee	PORAPAKKARM, Ponpoje	副指導教員 Sub advisor
	審査委員 Referee	藤本 淳一 FUJIMOTO, Junichi	副指導教員 Sub advisor
	審査委員 Referee	園部 哲史 SONOBE, Tetsushi	博士課程委員会委員長 Chairperson of the Ph. D. Programs Committee
	審査委員 Referee	宮崎 浩一 MIYAZAKI, Koichi (香川大学/ Kagawa University)	外部審査員 Referee from outside institutions
論文タイトル Dissertation Title	Essays on Public Policy and Population Aging in Developing Economies  発展途上国経済における公共政策と高齢化について		
学位名 Degree Title	博士（公共経済学）/ Ph.D. in Public Economics		
論文提出日 Submission Date of the Draft Dissertation	平成 28(2016)年 1 月 27 日	論文審査会開催日 Date of the Degree Committee Meeting	平成 28(2016)年 2 月 24 日
論文発表会開催日 Date of the Defense	平成 28(2016)年 2 月 24 日	論文最終版提出日 Submission Date of the Final Dissertation	平成 28(2016)年 3 月 28 日
審査結果 Result	合格 pass		

## 1. 論文要旨 Thesis overview and summary of the presentation.

This dissertation aims to study population policy and fiscal policy including pension and taxation in developing economies. Specific features in many developing countries, such as low fertility rates, large informal sectors and a trend of rapid population aging, are considered. This dissertation develops a 2-sector general-equilibrium overlapping generations (OLG) model with endogenous fertility and education choices for theoretical analysis. To provide meaningful quantitative assessment, Thailand is used as a representative for calibration and numerical exercises because it currently has a very low total fertility rate (1.5) and a large informal sector (> 60% of workers). Chapter 3 quantitatively investigates the impacts of aging and assessed the population/education policies. Chapter 4 discusses fiscal policies on taxation in an aging economy with informal employment. This study has found that while childcare subsidies (subsidies on time cost and lump-sum child allowances) do encourage fertility and improve age structure, they worsen the already low human-capital level and hurt social welfare in the long run, which possibly slows economic growth. Furthermore, if a consumption tax is available, it is the best tax tool for aging economy, as it causes fewer distortions on labor allocation, saving, and education investment. In addition, capital income tax should not be zero in an economy with a large informal sector. Chapter 5 summarizes the findings and provides a discussion on policy implications.

## 2. 審査報告 Notes from the Doctoral Thesis Review Committee (including changes required to the thesis by the referees)

During the final defence the candidate presented for about 1 hour and subsequently the referees asked questions and provided suggestions/comments.

The referees' main comments are summarized below:

1. The thesis should report the followings for the baseline model (and all experiment cases if applicable)
  - The fertility rate of skilled and unskilled groups ( $n_s$ ,  $n_u$ )
  - Relative wages between different groups of people
  - The annual return on capital ( $r$ ) . And how does this rate compare with the return on capital in Thailand?
2. The definition of the informal sector should be clearly defined.
3. The model makes an implicit assumption that people cannot avoid capital income

taxes and consumption taxes.

- How is this assumption consistent with the reality?
  - If there is no convincing argument that the avoidance of capital income taxes and consumption taxes in Thailand is relatively small comparing to labor income tax avoidance, there should be an illustration or discussion about how this would affect the conclusion that consumption tax is the least distorted.
4. Chapter 4 gives a conclusion that there should be no (pay-as-you-go) public pension in Thailand. I would be cautious about the conclusion since the model abstract from a couple important features of public pension, eg. income redistribution and insurance against longevity risk.
  5. It is easier to read if there is a baseline case in Table 4-6.
  6. Can you explain why the labor income tax increased again if the time-cost subsidy and child allowance subsidy are higher than 10% rate?
  7. On page 19, it might be better that you consider an altruistic (or dynastic) model like Becker's papers.
  8. On page 20, you should explain explicitly what  $V_{s,e}=\bar{e}$  and  $V_{u,e}=0$  are.
  9. On page 20, in the paragraph where you explain the optimal decision rules, there is lines that explain the fertility. In that line, there is an expression,  $w_i$ , and you should explain what is it.
  10. Do you consider support from children to their parent?
  11. Role of informal sector should be discussed more
  12. You should provide more information about current policy discussions/debates

The committee decided that the candidate had to response to all comments and revise the dissertation accordingly.

**3. 最終提出論文確認結果 Confirmation by the Main Referee that changes have been done to the satisfaction of the referees**

The candidate has revised her dissertation to incorporate the comments from the referees and has provided a separate document of responses, point-by-point, to all the comments, which I attached with this report. The referees are satisfied with the responses and the revision of her dissertation.

**4. 最終審査結果 Final recommendation.**

We recommend that the degree of PhD in Public Economics shall be awarded to Ms. Tanyasorn Ekapirak.